THE BOSTON
MEDICAL AND SURGICAL JOURNAL.

VOL. XCIX. — THURSDAY, OCTOBER 24, 1878. — NO. 17.

LECTURES.

BOSTON CITY HOSPITAL: CLINICAL LECTURE NO. IX.

BY DAVID W. CHEEVER, M. D.,
Professor of Clinical Surgery in Harvard University.

GENTLEMEN, — The two cases about to be presented, in their pathological and diagnostic aspects, are more interesting than anything else we have had during the present session. They exhibit two swellings, one of which is upon the breast, the other upon the nates, and are especially valuable because of the difficulties they oppose to a diagnosis.

Abscess under the Pectoralis Muscle. — The first of these cases is that of this young woman, who is twenty-eight years of age, unmarried, in fair health, but has remarked some diminution of the menses. Until Friday last she enjoyed her usual physical condition. She was then suddenly attacked by a severe pain, which involved the whole of the left side of the chest. Lifting or moving the left arm became very painful, and the patient found she could not lie upon that side of the body. She is now feverish; pulse 120; temperature has been as high as 102°, and is now 101°; her tongue is dry, and there are other indications of constitutional disturbance; uncover the chest and you see that the two sides have a very different appearance. The right is perfectly flat, and gives no evidence of being involved. The swelling is on the left side, but not in the breast itself, which is empty and flaccid. The dissimilarity between the two mammary glands is that although the distribution of the veins is the same in both, on the left breast they are much enlarged. Above this gland is a large fullness which obliterates the subclavicular hollow of this side. The two armpits also are unlike, the left being partly filled, the right empty. Since the patient came into the hospital the swelling has become markedly enlarged. The history is that of the rapid rise and development of a swelling, and of thickening of the neighboring tissues. When we have a suspicious and doubtful case of surgical enlargement or swelling, the first question to ask ourselves is, Is this swelling inflammatory or organic; is it an effusion or is it growth; is it an aggregation of leucocytes and fibrine, pushed out of the congested blood-vessels, or is it a proliferation of cells organ-

ized and permanent? The one is curable by absorption, or changeable into pus; the other is not. The one is hopeful; the other is not. The answer to this question, then, — inflammatory or organic, — settles the diagnosis, and often, also, the prognosis. The fever and high temperature make it obvious that something serious is going on in this patient. There has been one chill, which, if the fever had not been continuous, might intimate the presence of an abscess. But here fever has been a constant symptom. This gives rise to the question: Are there here inflammatory changes, indicating a deposit of pus, or a development of cells, leading to the formation of a tumor. I think the evidences are in favor of acute inflammation, for all the symptoms point in that direction. On the other hand, a rapidly growing tumor might develop insidiously, without being apparent until a given time, when the present symptoms of the case might suddenly appear. Incipient organic changes come on slowly, and without causing much disturbance; but inflammation is like a storm; everything is sudden, and the symptoms are severe. We have here an inflammatory swelling. Nothing in the previous condition or in the sex of the patient could have led to a chronic enlargement.

A patient recently came into the hospital with a large swelling, which obscured the axilla. In that case the symptoms were so far advanced that we found no difficulty in reaching a diagnosis of abscess. But here the trouble is still recent, and although there are heat, pain, and swelling the diagnosis is not so easy. What is the meaning of these enlarged veins? The probability is that swollen lymphatic glands and an effusion of plastic lymph press upon the axillary veins of this side, and thus shut back the blood in the veins of the mammary gland. In the child shown you the other day, in whose mouth was a fungous tumor, the growth had developed and forced out the teeth within three weeks. In this case the changes have all occurred in eleven days. My opinion is that here there is nothing more than inflammation and its results, for we have the evidence of heat, pain, and other symptoms. I show you the patient, and ask your careful attention to the case, because of its contrasts to the other of which I have spoken. I shall now aspirate the swelling in the axillary region, which you would naturally say is a tempting place, and which is more so now than previously. When I raise the left arm of the patient, the pectoral muscle, as you see, is thrown into bold relief. In case of abscess in this location pinch up this muscle, thus, and carefully insert the needle beneath it and parallel with the ribs, as I now do. If I get no pus, will that prove that there is no abscess? No, it will not. You will remember the case of the other day, in which there was a swelling over the tibia. On the introduction of the needle we fully expected pus would appear, but we found a hard tissue, mottled with lumps of lymph, and looking like Bologna

sausage. Before I insert the needle I think it well to incise the skin with a knife, in order to avoid clogging and blunting the point. The blood follows the incision quickly, showing the congestion of the part. The easiest method of introducing the needle is to separate it from the aspirator, and, having oiled it, to *rotate* it slowly into the abscess. Pus flows, mixed with blood, but it comes very slowly, and contains thick flakes, which will not pass through the needle. In acute cases of this nature the aspirator frequently disappoints us, because the matter will not run through so small a tube. I therefore lay it aside, and enlarge the opening into the cavity of the abscess. Introducing my finger, I find a cavity of moderate size filled with flakes of pus, venous blood, and pus in the formative stage, a few drops and flakes of which are enough to settle the diagnosis. The abscess will now be poulticed, and the patient put to bed. In a week we shall probably see a free flow of pus.

Note. The patient steadily improved; suppuration and absorption ensued.

Soft Malignant Tumor of Nates. — This case is more interesting. The locality of the man's disease forces him to lie upon his stomach, and also to take ether in the same position.

The patient's parents died in old age, and he is now forty-three years old. Fifteen years ago, by a railroad accident, he lost his leg at the upper third of the thigh. His present trouble involves the nates and a portion of the thigh of the other leg. Seven months ago a small lump of the size of a walnut appeared near the sacrum. Three months ago the swelling was aspirated in the out-patient department. Only blood followed the puncture. Since that time the growth has been slowly and steadily enlarging. Pain has been incessant, and morphia has been administered until it has become a necessity. The pain has extended down the leg, but not up the back. The patient came to us in this condition three days ago. I now show you the tumor. You see a swelling, very remarkable in size and shape; discoloration beneath the skin, and ecchymoses in several directions. The enormous growth involves the entire natis of one side. The first question is as to its nature. The view I now hold is that the age of the patient, the size of the tumor, its painlessness until large enough to press upon the nerves, its slow development, and the absence of pus on aspiration are symptoms which indicate the growth of a tumor rather than the effect of inflammation. But I may be wrong, in which case comes the assurance that nothing teaches so impressively as a mistake. One evidence of a tumor is these knobs on the surface of the swelling. Perhaps it is both a tumor and an abscess. This remark has an anomalous sound, but may be thus explained: a tumor begins to develop; during the process it obstructs the circulation; pressure upon the vessels being set up inflammation

begins, and effusion and pus form. This explains, too, the course of a surgeon who, with sarcoma in mind, plunges his knife into pus, thinks he has found a cold abscess, and so leaves it. I once had such an experience; the abscess never healed, but fungated and grew until it destroyed life. This patient is not strong enough to bear a lengthy etherization. I will therefore at once introduce the needle, and see what it brings into view. I get nothing, yet am convinced that the swelling has a large cavity, for the needle can be moved in all directions. We will now try a trocar of moderate size. Remember that there has been no injury here; there is no evidence that the tumor is a hæmatoma; neither is there fluctuation. Here is a little lymph-like fluid, which looks suspicious. I introduce a still larger trocar, and through it pass in a probe, which enters a distance of six inches, and touches the pelvis, but the fluid is not thin enough to flow through even this large trocar. A lump of soft curd, resembling sago, now comes out, and leads me to think this may be encephaloid disease; still I am not yet positive that it is not an abscess in the process of breaking down. I enlarge the opening and pass in my finger. I can now say that the swelling is a spongy mass composed chiefly of these curdy lumps. There is no cavity. The soft consistence of the tumor not only made semi-fluctuation apparent, but by allowing the probe to move about freely also gave the impression that a cavity existed. The fact that they show how dissimilar forms of disease take their rise renders both these cases very instructive. Here, for example, is what seemed to be a large cavity, — something like a toy balloon filled with pus. To the finger it is actually a mass like a tapioca pudding. The general appearance and cachectic condition of the patient at first gave us the impression that the swelling was an enormous cold abscess. Eventually this tumor will degenerate into a fungating mass. One of these sago-like lumps will be submitted to the microscope, and that will settle the diagnosis.

In regard to prognosis it must be said that the disease can have but one termination, and that a fatal one. We can do little or nothing, for the tumor of course cannot be removed by the knife. If the patient escape the rupture naturally consequent upon what we have already done, the tumor in a few weeks will burst of itself, and he will wear out and die. The disease is probably not confined to this locality. It has been steadily developing for seven months, and has perhaps extended internally into the pelvis. I am reminded here of a case I saw in consultation, in which after death a similar but smaller growth proved to have originated within the pelvis, and to have separated and emerged through the sacro-iliac junction.

Note. The microscope showed the sago-like masses to be made up of an infinite number of growing cells. The patient died six days later without hæmorrhage, but probably of embolism. No autopsy was allowed.

Lithotomy at Twenty-Three Months of Age. — This little boy has had trouble in micturition for a number of months. As it was thought to be partially due to an irritation from a long foreskin, he was circumcised two months ago. Although the wound has perfectly healed, and the glans penis is pale and free from inflammation, yet the frequent and painful micturition has not been relieved. He now is brought by his parents for farther examination. First he is to be etherized, and then we will explore the bladder. I select a Thompson's sound for this exploration, because it has a very short curve. A long-curve catheter enters the bladder of the very young with great difficulty.

As soon as we enter the bladder the sound strikes a hard, rounded, and movable substance. It is a stone, and of course must be removed, and at this youthful age lithotomy is the operation. Crushing is not to be thought of. The mortality after lithotomy increases steadily with age. Past middle life it is often fatal. In childhood it is rarely so. We must remember that at this age (under two years) the prostate is so small an organ that an incision into or the removal through it of a moderate-sized stone must cut or tear beyond its circumference and its investing fascia. This probably always happens in cutting for stone at a tender age. Yet recovery is the rule. Before operating I introduce a small grooved staff. This staff has the groove toward the right side, and not in the middle. It is an imperative rule that the surgeon must touch the stone with the staff just before cutting. I make a straight, linear incision between the bulb and the anus until I reach the groove in the staff. Then, guided by my finger nail, I place the point of my knife in the groove, and, depressing the handle of the staff, cut more laterally, through the membranous and prostatic portions of the urethra into the bladder. Now pass in a director through the wound into the bladder; withdraw the staff; explore the bladder with the index finger. There is just room between the rami of the pubes and ischium to pass the finger. The stone is readily touched. I extract it with polypus forceps; ordinary lithotomy forceps are too large here. The stone, which I now show you, is as large as three fourths of an English walnut, flattened and oval. We wash out the bladder with cold water, insert an elastic catheter, and fasten it in. The wound is *not* to be packed (unless to check severe hæmorrhage), because that favors infiltration of urine. The catheter will be removed to-morrow. Then the water will flow through the wound. During the second week some will pass by the penis. The wound will close, at this age, in three to four weeks.

Note. In this case the urine began to pass through the penis on the fourth day, which is much sooner than in similar cases in the adult. The reason is that in this child the operation was the median and not the lateral. In a patient of the age of this one there is not sufficient room to do the lateral operation. To-day (seventh day) the case is doing well.

A CASE OF MITRAL INSUFFICIENCY, WITH EMBOLISM OF THE LEFT VERTEBRAL ARTERY.

BY J. W. KEENE, M. D.

THE patient, T. C., a married man, forty-eight years of age, was attacked on the night of December 19, 1877, with severe pain in the præcordia, attended with nausea and vomiting. The pain was described as "tearing" in its nature, and radiating from the præcordia across the sternum, down the left side, and upward to the shoulder. The patient complained much of the "fluttering" of his heart. He had been subjected to considerable excitement during the previous day on account of finding a sum of money in his store, and seeking for the owner, to whom he returned it. The surface was pale and cool; the aspect of the face anxious and distressed; temperature not notably increased; pulse 130, weak and fluttering, usually much stronger in the left radial artery than in the right. The impulse in the two arteries was synchronous, and at times of nearly equal strength. The patient had noticed the difference himself. In this regard the case resembles one reported by Dr. Hamilton Osgood in the *American Journal of the Medical Sciences* for October, 1875. In the case reported by him, however, the pulse was stronger in the right than in the left radial, — the reverse of the condition in the case under consideration. Much palpitation was felt when the hand was laid upon the præcordia, but this did not seem to affect the pulse as felt at the wrist. No cardiac murmur was detected. An examination of the urine, made the following morning, gave negative results both microscopically and chemically. No history of arthritis or of renal disease in any form could be obtained. He had usually been healthy, except that he suffered from hæmorrhoids, and was also subject to "bilious attacks," attended with pain in the epigastrium. These attacks invariably yielded to domestic remedies, — a sinapism usually sufficing. He had an attack of acute pleuritis in the left side ten years ago, but had not suffered from dyspnœa on exertion, nor did he suspect himself to be affected with heart disease, although both his parents were said to have died of it in some form, and his living brother and sister were sufferers from the same cause. The case was diagnosticated as angina pectoris. The pain was relieved by morphiæ sulphas, one sixth grain, administered hypodermically. The vomiting was arrested by creosote, and the tincture of digitalis was prescribed to be taken in doses of eight minims four times daily. Attendance was continued nine days, during which the urine was several times examined chemically, with negative results, and repeated examinations of the chest failed to detect any cardiac murmur. The heart's action gained in strength and lessened in frequency; the appetite continued good, and the bowels regular, though he was usually a sufferer from chronic con-

stipation, and had contracted the syringe habit, using enemata almost every day. He slept well, but was annoyed by troublesome dreams. He was now told what his disease had been, and cautioned not to exert himself suddenly, or to allow himself to become excited.

The patient was next seen February 20, 1878. He then complained of not sleeping well, and not recovering his usual strength. He was able to attend to his business in part, but noticed that any exertion whatever caused his pulse to rise to 120 or 130. On walking rapidly about the room the accuracy of his observation was manifest, the pulse rising from 104 to 124. The usual rapidity of the pulse was at this time about 100. He was given a tonic, directed to use the bromides of potassium, grains xx., and ammonium, grains x., at night, and to continue the digitalis in the same dose as before, omitting it for three days after using it ten.

On March 3d, the symptoms were aggravated. Marked dyspnœa was manifest, the respiration being 35 to 40 per minute. A well-defined murmur was heard at the apex of the heart corresponding to the systole. There were subcrepitant râles over the left lung, especially the lower lobe, and to a slight degree in the right lung. Pulse 130, thready and feeble. Alcoholic stimulants were well borne, and the pulse gained in strength. As the patient had slept very little for several nights, despite of the use of bromides, a hypodermic injection of sulphate of morphia, grain one eighth, was administered, after which he slept for several hours.

An examination of the urine at this time gave the following result: Amount very small; color dirty, yellowish white; reaction strongly acid; specific gravity 1030; urea slightly increased; albumen two per cent.; sugar absent; no blood, pus corpuscles, or casts; oxalate of lime crystals; opaqueness due to urates.

March 5th. The signs of pulmonary œdema were well marked in both lungs; the heart murmur less distinct. Some cough.

March 7th. A consultation was held with Dr. F. I. Knight. Physical examination resulted as follows: Area of cardiac dullness increased; systolic murmur at apex, and first sound as heard at apex, tolerably strong. On percussion behind, flatness was manifest below the angle of the scapula on the right side; good resonance over lower part of left side. Subcrepitant râles over lower part of left chest, and to a less marked degree over lower part of right chest. The diagnosis was made of insufficiency of the mitral valve, with pulmonary œdema, and an effusion into the right pleural sac. It was remarked that the effusion did not exist in the left side also, as is usual in dropsical effusions. Prognosis grave.

Treatment. The tincture of digitalis was replaced by a pill containing pulv. digit. gr. one half, pulv. colchici grs. two; one pill to be given

three times daily. Acetate of potassium as a diuretic, grs. xv. every three hours.

During the evening the patient was seized with an attack of vomiting, followed by dry retching. Creosote was given, but without completely arresting the nausea. Dyspnœa was more marked, and coarse mucous râles were heard in both lungs, plainly audible in any part of the room. The patient was left at twelve o'clock comparatively comfortable. The respiration was not above 38; cough somewhat troublesome, and occasional sensations of nausea.

At two o'clock A. M. of the same night I was summoned in great haste, the messenger stating that the patient had had an "explosion" in his head, and was thought to be dying. He was found with a pulse too rapid to be readily counted; respiration about the same as when left two hours before; countenance portraying great solicitude and fear; perfectly conscious, and able to converse. The surface was cool and clammy; the extremities were cold. He explained that a "gun went off in his head." The attendants stated that he did not lose consciousness even momentarily, but exclaimed that something had happened in his head. His mouth was drawn far to the right side; the left eyelid did not close with the other. The tongue was protruded without material deviation from the median line. There was no apparent loss of motion in the limbs of either side. He could press equally hard with either hand, and could move the legs at will. Speech was interfered with, but he could readily make himself understood. The distortion of the lips would probably account for the disturbance of speech. He complained that the right limbs and the entire right side were numb, and the latter seemed far less sensitive to pinching or touching than the other side. The conclusion reached was that an embolus had lodged in one of the arteries of the left side of the brain. Paralysis of the muscles of the left side of the face was manifested by the loss of control of the left eyelid, and by the opposing muscles drawing the mouth to the opposite side. The material loss of sensation in the right limbs and side with no perceptible loss of motion was a point of interest. The pulse fell gradually to 124, the respiration being 36, labored and heavy. The coarse mucous râles in the larger bronchial tubes were more distinctly heard in all parts of the room. He complained of less ability to expectorate than formerly, and had been unable to take his medicine. A fomentation of digitalis leaves was applied over the kidneys, which gave some relief, but failed to urge them to action. He sank rapidly, and died of apnœa at eight A. M.

Autopsy March 9th. Present, Drs. E. G. Cutler, Morong, and Chenery. The following notes were kindly furnished by Dr. Cutler, who performed the autopsy: —

"Hours after death, thirty; post-mortem rigidity marked. On open-

ing the head the membranes were not remarkable. The convolutions of the convexities were somewhat flattened. The left vertebral artery, near its junction with the right to form the basilar, was plugged with an embolus of a tawny yellow color, behind which was a dark-red coagulum. The commencing portion of the left posterior cerebral artery was also plugged by a similar clot. No difference was perceived in the gross appearances on section of the brain on the two sides. The puncta cruenta were slightly marked on both sides; the lateral ventricles of the brain by estimation contained about two ounces of a clear serum. On opening the thorax the right arch of the diaphragm was a little lower than the left. The former was at the sixth rib in the mammillary line; the latter was at the fourth intercostal space or upper border of the fifth rib. Somewhat more than one quart of clear, yellow serum was estimated to be in the right pleural sac. The right lung was very much contracted, and was separated from the chest wall at every point, even at the apex, but, aside from retraction and the presence of some frothy mucus in the bronchial tubes, was not remarkable. The left lung was closely bound to the chest wall everywhere by dense fibrous adhesions, and also to the diaphragm. On section it was quite œdematous, and its bronchi contained frothy mucus.

"The heart was full of blood, and in a state of distention on the right side. There was a clot in the left auricular appendage; the time of its formation was probably shortly before death. The left ventricle was hypertrophied; aortic valves sufficient; auriculo-ventricular opening admitted two and one half fingers. The posterior segment of the mitral valve was thickened and shortened in the centre so as to be scarcely perceptible. The muscle was of good consistency and color. Except the kidneys the other organs were not remarkable. The left kidney was about twice the normal size. The right kidney was reduced to an irregularly knobbed closed sac, nearly the size of the fist. On section it was found to have walls of variable thickness, averaging two lines, and to be hollowed out into several pouches filled with a white substance of a thick, pasty consistence. The microscope showed this substance to be granular fat, granule cells, and cholesterine plates. The ureter was perfectly closed at the point of its origin from the pelvis of the organ; in the rest of its course it was normal.

"The source of the embolus was not determined."

The unilateral effusion into the pleura, contrary to what usually obtains in effusions of a dropsical nature, is explained by the fact that the left pleural sac was obliterated by the adhesions found there, — the result of the pleuritis mentioned in the history of the case. The condition of the kidneys is interesting from the absence of the history of any disease of those organs, or of pain in that region. It seems probable that the occlusion of the ureter was caused by a subacute pyelitis,

the walls gradually thickening, and the calibre of the canal diminishing so slowly that the left kidney was able to accommodate itself to the increased work of renal elimination, until at the time of complete closure of the canal the organ of the opposite side had become considerably hypertrophied and capable of performing its own work and that of its fellow, while its useless associate gradually underwent the degeneration above mentioned.

Is it possible that what the patient called bilious attacks were in reality passages of renal calculi? The history hardly warrants this conclusion, yet, in view of the tendency of the laity to attribute all sorts of symptoms to biliousness, is it not possible that these attacks, the history of which at best is obscure and unsatisfactory, were due to this cause, and that the missing link in the sequence of cause and effect in the case under consideration may be thus supplied?

A CASE OF LEUKÆMIA.[1]

BY A. T. CABOT, M. D.

The patient was a woman of fifty-seven. The history in brief is that during the past year she has gradually lost flesh and strength, and frequently has suffered from feelings of uneasiness in the epigastrium and left hypochondrium, accompanied by loss of appetite and annoying constipation. For the past two months these symptoms have been continuous, gradually increasing in severity, until towards the close of life pain in the regions mentioned became excessive, and was accompanied by great tenderness. An ill-defined tumor was to be felt projecting slightly from beneath the false ribs on the left side. A nodule was also to be felt in the epigastrium. On account of the thickness of the abdominal walls and the great tenderness, the relations of these tumors to each other could not be well made out. An examination of the urine showed a very large sediment of uric acid crystals; otherwise nothing abnormal. About a fortnight before death the skin, which had before been pale, assumed a decided lemon-yellow tinge. Her throat at this time was painful, the fauces were red and dry, and covered with tenacious mucus. The glands on both sides of the neck were swollen. Four or five days before death a number of hæmorrhagic spots appeared on the breast and abdomen.

Autopsy twenty-four hours after death. The lungs were healthy. The heart was abnormal only in being pale and flaccid. The clots in the heart, as in other organs, were found to be yellowish-white throughout, with no red portion.

The spleen measured seven and one half inches in length, four and one

[1] Read before the Suffolk District Medical Society, March 30, 1878.

half inches in breadth, and two and three fourths inches in thickness. It was attached to the parts in its vicinity by recent fibrinous adhesions. The larger part of the spleen was in a condition of cellular hyperplasia, the pulp concealing the follicles and septa. Other considerable portions had undergone an inflammatory process, which had left them somewhat indurated. The perisplenitis was for the most part confined to the surface of the latter portion of the organ. Besides these more extensive changes, there were at and near the surface of the spleen several firm masses of a whitish-yellow color, wedge shaped, with their apices directed toward the hilus. Although no embolism of the vessels supplying these parts could be made out, still they were probably old hæmorrhagic infarctions. Scrapings from the cut surface of the spleen put under the microscope showed a few cells containing one, two, and three red blood cells and many red blood corpuscles, which, in addition to their own proper outline, were surrounded by another membrane, in some portion of which a nucleus could generally be discovered.

The kidneys were anæmic. Upon one of them, between the capsule and parenchyma of the organ, was a grayish tumor of about the size of a bean. From the surface of the kidney in contact with this a gray wedge of tissue extended down into the cortical substance of the organ. The tumor consisted of lymphoid cells, and the grayish tissue beneath, and while retaining the connective tissue net-work of the organ, contained no trace of the epithelium of the tubes, its place being occupied by lymphoid cells. In other parts of the organ these cells were found among the proper elements of the kidney, which they had not yet succeeded in destroying. In one suprarenal capsule, between the inner layers of the medullary substance, was a cavity containing about a drachm of a reddish-brown fluid, and on its wall was the fibrinous portion of a tolerably recent clot. The other was normal, with the exception of a few grayish points of lymphoid tissue in the medullary portion.

The liver was pale, and thickly studded with fine grayish points. The blood in the vessels was extremely rich in white cells, rather smaller than ordinary white blood corpuscles. Microscopic sections of the hardened liver showed the acini separated from each other by a broad net-work of round cells. The spaces between the individual cells of the acini were occupied by narrow lines of similar cells, which in many instances could be distinctly seen to be in the capillary vessels. The digestive track offered no noticeable changes. The retro-peritoneal glands were much enlarged, especially behind the pylorus, where there was a mass of the size of a small fist.

RECENT PROGRESS IN SURGERY.

BY J. COLLINS WARREN, M. D.

Operations on the Inverted Head. — Dr. Julius Wolff, in a late number of Volkmann's lectures,[1] gives an interesting account of his experiences with this method of avoiding the flowing of blood into the trachea. It was invented, he says, by Rose, and consists in placing the patient on his back during anæsthesia, and allowing the head to hang at right angles with the body over the end of the table. The danger of operating upon the throat and jaws in the erect posture we well know. Profound anæsthesia renders the air passages insensible to the presence of blood, and it requires but a moderate amount to interfere seriously with respiration. The writer suggests that blood may not only flow, but may even be drawn into the trachea by a deep inspiration, and also mentions cases where an amount of blood not sufficient to produce dangerous symptoms during the operation caused subsequently fatal bronchitis and pneumonia. The amount of blood swallowed is thought sometimes to bring on fatal disturbances of the digestive apparatus, as occurred apparently in one of the author's cases. To avoid these occurrences it is necessary in certain cases to insert a tracheotomy tube and plug the pharynx, — a very serious addition to any operation. On the other hand, with the head in the inverted position the blood flows readily from the mouth and nostrils into a basin below, and respiration goes on unimpeded. The head is in a convenient position for operating, and the mouth is much more easily illuminated and approached than in the usual position. Dr. Wolff employs this method in a large number of operations, including not only those in the mouth but on the lips and face; also in tracheotomy, for which the position of the neck is particularly favorable, the trachea being drawn out much further from the thorax, and the soft parts being made more tense over it than in the usual position. So far from being dangerous during the action of chloroform, it is supposed to offset the tendency to anæmia of the brain caused by that drug. The disadvantages of the method are: the extra amount of bleeding caused by the dependent position; but this is not much greater than ordinarily occurs. Patients complain of considerable stiffness of the neck and headache after the operation, and Rose has suggested that if the head is swung back too rapidly into the horizontal position dislocation might occur. To offset the disadvantage of extra hæmorrhage in excision of the upper jaw, Volkmann separates the cheek from the jaw and cuts through the malar and nasal processes while the patient is upright; then changes the position and cuts through the gums and palate. Dr. Wolff has performed a number of operations for the relief of cleft palate in the inverted position, and finds it far superior to any other.

[1] Sammlung klinischer Vorträge, No. 147, September, 1878.

Abdominal Taxis in Intestinal Obstruction. — Mr. Jonathan Hutchinson contributed an interesting paper, entitled Notes on Intestinal Obstruction, its Diagnosis and Treatment, to the medical section of the British Medical Association at its annual meeting. The author advises strongly against exploratory operations. He says of this operation: —

"Let no one compare abdominal section under such circumstances with ovariotomy, or urge that recent observations as to the tolerance of the peritonæum afford legitimate encouragement to boldness in these cases. It is one thing to diminish the abdominal contents by the removal of a large tumor, and to deal with intestines which are healthy and empty; it is another and very different task to open an abdomen distended almost to bursting by inflated bowels which are in a state of disease and ready at various points to give way. However careful the operator may be, it is almost certain that he will finish in having half the intestines outside, and in being at his wits' end to get them back again; with, perhaps, the added horror of a rupture of the bowel and unlimited extravasation of fæces."

Under the term abdominal taxis are included all measures designed to effect the reduction of loops of intestine which have become twisted, misplaced, or strangulated, within the cavity of the abdomen. Chiefly, it implies putting the patient under an anæsthetic, and then alternately lifting him by the legs and shaking him in the inverted position; then forcibly kneading the abdomen, giving enemata in the inverted position; and, lastly, making him lie for long periods on the belly, with the pelvis elevated. He has practiced this kind of treatment in many cases, and has never once opened the abdomen without knowing with tolerable certainty what he might expect to find. Whenever the diagnosis was uncertain he has steadily refused to operate, or, if the case were not his own, has done his best to dissuade the surgeon in charge.

In speaking of those cases where the precise cause of obstruction has been definitely diagnosticated, which occurs in a very limited number of instances, he advises in cases of invagination abdominal section. "Here," he says, "the surgeon knows what he is going to attempt, and that in the majority of cases it can be easily accomplished. The operation is justifiable at a comparatively early stage, when there is not much risk of rupture of the bowel, and but little difficulty may be expected in getting the contents back into the abdomen. Yet even here the operator encounters the discouragement of knowing that nature is competent to the cure by sphacelus of some of the most desperate forms of intussusception, and it is not yet settled whether leaving them to this chance involves less or more risk than operating. My own opinion is, however, definite; and in any such case, enemata, insufflation, and other measures having had patient and repeated trials, I should not hesitate to open the abdomen. I have done this in two cases, and in

one of them with perfect success; and successful cases have also been recorded by Mr. Howard Marsh, Mr. Howse, and other surgeons. In the peculiar form of intussusception beginning at the cæcum and advancing until the inverted ileo-cæcal valve presents at the child's anus, I should suspect that an operation will always be required, for I know of no reliable record of the recovery of such a case, either by gangrene or by the measures to which we may apply the name of rectal taxis."

He gives the following memoranda for treatment: —

"(1.) In all early stages, and in all acute cases, abstain entirely from giving either food or medicine by the mouth.

"(2.) Use anæsthetics promptly. Put the patient under the full influence of ether; examine the abdomen and rectum carefully before tympanites has concealed the conditions; administer large enemata in the inverted position of body; and, if advisable, practice abdominal taxis. If you do not succeed at first, do it repeatedly.

"(3.) Copious enemata, aided perhaps by the long tube, are advisable in almost all cases, and in most should be frequently repeated.

"(4.) Fluid injections may be sometimes replaced by insufflation of air in cases of invagination, since air finds its way upwards better, and is more easily retained. It is, however, somewhat dangerous, and has perhaps no advantages over injections with the trunk inverted.

"(5.) Insufflation is to be avoided in all cases of suspected stricture, since the air may be forced above the stricture and there retained.

"(6.) Saline laxatives are admissible in certain cases where impaction of fæces is suspected, and in cases of stricture where fluidity of fæces is advisable.

"(7.) Opium (or morphia) must be used in proportion to the pain which the patient suffers. It should be administered by the rectum or hypodermically, and should be combined with belladonna. If there be not much pain or shock, it is better avoided, since it increases constipation and may mask the symptoms.

"(8.) A full dose of opium administered hypodermically will put a patient in a favorable condition for bearing a prolonged examination under ether, and attempts at abdominal taxis.

"(9.) In cases of uncertain diagnosis it is better to trust to the chance of spontaneous cure or relief by repeated abdominal taxis than to resort to exploratory operation; or, in desperate cases, iliac enterotomy should be done. Operations for the formations of an artificial anus in the right or left loin may be performed whenever the diagnosis of incurable obstructive disease in the lower bowel is made.

"(10.) The operation for the formation of an artificial anus through the anterior part of the abdominal wall and into the small intestine should be resorted to only in certain cases of insuperable obstruction, in which the seat of disease is believed to be above the cæcum.

"(11.) In all cases in which the precise seat of disease is doubtful, but the large intestine is suspected, the *right* loin should be preferred. If the colon here be found to be empty, the peritonæum may be cautiously opened and a coil of distended small intestine brought into the wound.

"(12.) My last suggestion as to treatment is one which, speaking as I do in a medical section, I feel some delicacy in making. It is, however, I believe, a very important one, and it is this: that cases of mechanical obstruction are really surgical and not medical cases. They require manipulative measures both for diagnosis and for treatment, and they require them early. It is difficult to explain why it has come about that, as a rule, a physician is called in first, and nothing but drug treatment usually adopted in the early periods; and it is, I am convinced, much to be regretted. The surgeon is but too often asked to see the case only in the last stage, when it is thought that perhaps an operation may be desirable. At this period the abdomen is distended, and an accurate diagnosis impracticable; but, what is worse, the stage at which abdominal taxis is most hopeful has passed. My remarks do not, of course, apply when the medical attendant possesses the knowledge and exercises the functions of both branches."

(To be concluded.)

PROCEEDINGS OF THE SUFFOLK DISTRICT MEDICAL SOCIETY.

A. L. MASON, M. D., SECRETARY.

MARCH 30, 1878. Seventy-five members were present, the president, DR. HOMANS, in the chair. The records of the last meeting were read and accepted.

United States Pharmacopœia. — It was voted that the councilors be requested to appoint a committee to report upon the next revision of the Pharmacopœia.

By-Laws. — With regard to the revision of the by-laws of the society, which was proposed in order to make them conform to those of the other district societies and of the Massachusetts Medical Society, it was voted, on motion of Dr. Bowditch, that the subject be postponed until the next meeting, and that a printed notice of the changes proposed be sent to each member.

Carcinoma of the Conjunctiva. — DR. ALBERT N. BLODGETT read a paper on Carcinoma of the Conjunctiva, in a case occurring in the practice of Dr. H. Derby, who supplied the clinical history as follows: The patient is a clergyman, seventy-one years of age, native of Ireland. His mother is said to have died of cancer, but no definite clinical history of her case is known. He himself has been in feeble health for a number of years, has had his feet frozen, and is the subject of hernia. September 24, 1877, he presented himself, and complained of a small tumor on the conjunctiva of the left eye, situated at the inner edge and opposite the middle of left cornea, 2 mm. long, 1.5 mm. broad, and 1.5 mm. in height, of a peculiar whiteness, and having a granular surface,

as if made up of numerous fine grains of sago. A livid redness surrounded it, gradually shading off into the healthy conjunctival white. A fortnight later the growth was 4 mm. long, 3 mm. broad, and 2.5 mm. high. Ether was administered, and the whole carefully excised October 8th. Healing was good. Two weeks later a very small similar growth was observed at the lower edge of the wound, and after consultation with Dr. Wadsworth was carefully excised under ether. Every trace of the growth was removed. The cornea remained clear and intact.

Dr. Blodgett gave a description of the histological character of the growth, which was carcinomatous, the microscopic view being represented by India-ink drawings. Medical literature contains but few cases where the description of this disease is so clear as to make a diagnosis possible. Many cases are recorded as indignant disease, scirrhus, cancer, epithelial disease, etc., where it is impossible in the present confusion of terms in pathology to determine in many instances what the disease may have been. The importance of a careful histological examination of tumors was pointed out, as well as the necessity of nomenclature in pathological growths which should be founded upon the histological structure of the growth, and not upon physical peculiarities. The proper designation for growths of the kind under consideration is *carcinoma*, rather than any of the names often applied to it, for this name carries with it a distinct idea of the structure of the tumor.

The primary development of carcinoma in a part of the body previously healthy was next described and illustrated by drawings from sections. The epithelium is the invading element in this disease, and forms massive trunks which plow the tissues in all directions, causing their destruction, and producing the enormous loss of substance sometimes observed. The ulceration is caused by the necrosis of the epithelium itself. It is well known that blood-vessels do not ramify in epithelium, but extend only to the boundary of the connective tissue, upon which the epithelium is developed as a covering. The cells of epithelium are proliferated from its deepest layers, and are pushed up toward the surface by the multiplication of new cells below it. For a certain distance upon its way to the surface the cell can absorb sufficient nourishment from the connective tissue to sustain its vitality, but when it is a little further removed from the connective tissue the nutritive supply is no longer sufficient, and the cell becomes shrunken, flattened, and dry, and is finally cast off from the surface as a scale of epidermis. If the epithelium takes a direction downward into the connective tissue, the march of the epithelial formation is followed by the necrosis of the same at a certain distance behind, thus producing a more and more extensive loss of substance. This may be proved in any advancing case of carcinoma; wherever the disease is active the microscope will show masses of cells penetrating into structures not before infected, and at a certain distance behind we shall find the necrosis of the epithelium as above described. The "bird's nests" are the result of pressure upon the necrosed epithelium, and are not always found. They are not of definite shape, but take any appearance which the pressure of the parts around may impart. The thick, indurated connective tissue around the masses of epithelium is due in great measure to the mechanical irritation of the epithelium,

which acts as a foreign body in the tissues. For this reason the Germans call it *Reizungsgewebe* (irritation tissue). In cases of so-called scirrhus it is the hypertrophy and induration of the connective tissue surrounding the epithelial masses which cause the great hardness. In secondary deposits the same kind of epithelium is found as in the primary form of the disease.

The probability of recurrence of the disease in carcinoma of the conjunctiva seems rather less than in other parts of the body, for the reason that the disease in this location is brought to the notice of the surgeon at a much earlier period of its development than would be thought necessary in other situations There is now, after a lapse of six months, no sign of a recurrence in this patient, although no one would venture to say there was no danger of a return.

Dr. Wadsworth mentioned two similar cases in which he and Dr. Williams had operated, the eye having been enucleated in one instance, and a tumor, which undoubtedly was an epithelioma, having been removed in the other nine months before without recurrence. He thought that such tumors might not be so rare as had been supposed.

A New Theory regarding Myopia. — Dr. D. Hunt read a paper on Myopia, of which a *résumé* follows : —

Considering the anatomical facts presented at the last meeting, we believe that the form of the myopic eye is caused by increased growth of the brain tissue, which forms the optic vesicle; this increased growth is produced by causes similar to those that have effected the enlargement of the cerebral vesicles, the results of which we notice in the greater frontal development of civilized man.

The type of ciliary muscle characterizing myopic eyes is a production of the same agencies that effect the elongation of the globe; sclerotica and ciliary muscle form from the same layer of embryonic connective tissue, and at the same date.

The separation of the sheaths of the optic nerve represents an embryonic enlargement of the head of the optic nerve, also caused by the increased growth of the retina composing the optic vesicle.

Posterior staphyloma is the result principally of an increased growth of the embryonic ganglion of the fifth nerve; this ganglion and the optic vesicle enlarge at the expense of the layer of connective tissue situated between them; the posterior portion of the temporal half of the eye is developed in this layer of connective tissue. The augmented growth of the ganglion of the fifth pair, which is the principal agent in the causation of posterior staphyloma, encroaches directly upon the connective tissue forming the root of the first branchial arch. This results in a decrease of the protuberance of the maxillary structures formed from this arch; in other words, contributes to a decrease of prognathism.

Organic lesions that terminate in destruction of nerve terminations are generally not hereditary. We believe that the cause of this peculiarity is to be explained by considering the central nervous system as the active agent in producing hereditary changes; the sudden destruction of the nerve terminations prevents the long-continued and oft-repeated impressions upon the central

nervous system that seem to be necessary to make any local peculiarity (the point of origin of the impressions) an hereditary trait.

Examining Table. — Dr. Chadwick showed a new table which he had devised for gynæcological purposes. It is described in full, with illustrations. in the *American Journal of Obstetrics*, April, 1878, and is for sale by Messrs, Codman and Shurtleff.

Cerebral Syphilis. — Dr. Ayer reported an interesting case of Cerebral Syphilis, which was published in the Journal, September 19, 1878.

Dr. Bowditch asked whether it would not have been allowable to use a mild mercurial course, as the iodide of potassium evidently did not give relief. In this case, when the end was certain death unless relief were obtained, and especially when the case was evidently syphilitic, would not the use of calomel have been proper?

The case reported brought back to Dr. Bowditch's mind that of a student in a seminary of this city, whom he was called to attend. The patient was about twenty years old, and had been gradually growing more and more ill for two years. He had most violent headaches, occurring especially in the night, destroying quiet sleep, and finally reducing not only the physical health, but also the mental powers, so that the patient had been obliged to give up all intellectual exercise, and was listless about everything. When Dr. Bowditch saw him, he was having intense headaches every night, and he seemed childish. He had been under the care of two physicians, one of whom thought he had softening of the brain, and the other diagnosticated a cephalic tumor. On close inquiry, the patient denied all syphilitic taint. There were no symptoms of that disease, unless this nocturnal cephalalgia were one. The patient had been treated during the two years with various remedies without effect. All those employed by Dr. Bowditch seemed useless, and gave no relief. Dr. Bowditch said that our fathers would have used mercurials in such a case, and he thought it proper treatment. Accordingly, discarding all other remedies, calomel alone was given, a grain or two grains daily, in divided doses, three times a day. The patient was directed to suspend temporarily the treatment as soon as any soreness of the mouth, or even a metallic taste, was felt. The result was that, for six weeks or more, the slightest soreness and ptyalism were kept up until the patient wholly recovered. Some relief began with the first trace of the mercury on the mouth, and it went steadily onwards to the perfect cure. It seemed as if something had been effectually overcome by the use of calomel.

Dr. Bowditch was well aware that one case would prove nothing. Dr. E. H. Clarke, when the case was read at another society, had asked whether it might not have been a mere coincidence rather than a consequence of the mercurials. The reply was that it was easier to believe the cure was a consequence of the continued use of the remedy than that, after two years of suffering and gradual prostration in body and mind, with constant headaches, relief, by a mere coincidence, should have suddenly begun, and gone on step by step, but comparatively quickly, to perfect restoration to health, without any relation existing between the remedy and the cure. Dr. Bowditch regretted that mercurials had not been cautiously tried in the case reported by Dr. Ayer.

Embolism of Left Vertebral Artery. — Dr. J. W. Keene reported the case, which is published in full, page 522.

Leukæmia. — A case of leukæmia was reported by Dr. A. T. Cabot. It is published at length on page 526.

CARIES OF THE TEETH.[1]

The treatise now under consideration is devoted to the thorough scientific study of carious teeth. That this may be followed to its full extent, the inquiry is necessarily directed to the pathological anatomy of the tooth, the ætiology, experimental pathology, symptoms, and treatment of the affection. That Dr. Magitot's qualifications are such as to render him capable of taking a broad view of the subject is to be inferred in part from the number and character of his titles, but more especially from the opinion expressed in the translator's preface, and constantly corroborated by the interested reader of the work. Some of the points which are likely to prove of interest to the physician may be briefly referred to.

The author makes an artificial division of caries into the superficial, middle, and deep varieties, according as the enamel, ivory, or pulp-cavity has become involved. The simplicity of this classification is to be seen by comparing it with the prevailing scheme in France, which comprehends seven distinct forms, each constituting "in some sort a different malady." Certain of these forms are regarded as wholly confounded, while almost all of them may be artificially produced in the course of simple and single caries.

The importance of hereditary conditions in determining the beauty and stability of teeth is referred to, though unfortunately these characteristics are less often met with than the defects of form and composition, attributable to the same general influence, as well as to disturbances arising during the development of the tooth before it actually reaches the surface. These disturbances may take place before the birth of the infant, owing to various affections of the pregnant mother, or may be acquired after the child has been born. The caries of the temporary teeth without appreciable cause belongs in the former series, while in the latter some of the causes are readily appreciable, as is later shown.

Numerous tables and diagrams are given, based upon the analysis of ten thousand cases of caries. These indicate the relative distribution of the affection as far as individual teeth are concerned. As regards sex, it is found that women are more prone to the affection than men, in the ratio of three to two. The bearing of age is also stated, and with reference to the decay of special teeth. From these tables the importance of local conditions in the mouth is inferred, and as caries is regarded merely as a chemical alteration of the tissues, Magitot considers that the occurrence of the disorder in certain races and families is due not to the inheritance of caries as such, but to structural predispositions which more readily permit the injurious action of local causes.

[1] *Treatise on Dental Caries.* Experimental and Therapeutic Investigations. By Dr. E. Magitot. Translated by Thomas H. Chandler, D. M. D., Professor of Mechanical Dentistry in Harvard University. Boston: Houghton, Osgood & Co. 1878. Pp. 275.

This cartographic method of considering the subject evidently has a special interest for the author, who is found to be a member and important officer of the Paris Anthropological Society. He is led into an interesting and suggestive though brief consideration of the importance of race, based upon the examination of crania from various collections. The really valuable part of this section is derived from the data observed in France. The necessary statistical tables were to be found in the archives of the war department, as conscripts are exempt from military service in consequence of the loss of certain teeth or the decay of many. From these tables Magitot has been enabled to draw a chart, which is inserted at the end of the volume, and which shows, by means of shading, the prevalence of caries in different parts of France. From this chart and well-known characteristics — geographical and social — of the sections concerned, he is able to form a valuable opinion concerning the often maintained though evidently loosely made statements concerning the injurious effects of drinks, as water, wine, beer, and cider. So with reference to the influence of river-courses, the vicinity of the sea, the nature of the soil, the climate, and of the social condition of the inhabitants, all of which have been supposed to exercise a greater or less influence in the causation of caries. His study into the bearings of the chart have led him to the conclusion that in France race is of more consequence in the production of endemic caries than soil or surroundings.

The consideration of conditions existing in the mouth is necessarily of the greatest practical consequence, as the sufferer may be regarded as exempt from responsibility on account of race and other congenital peculiarities. It is in this part of the book that Dr. Magitot's experiments are to be found, which have proved so valuable in determining the more exact nature of the processes by which dental caries is brought about. The result of these experiments shows that the prime factor is an acid which dissolves the calcareous salts of the teeth. This is the real and constant element, though there are many others which serve as complications. The relation of putrefaction and the presence of germs are considered as secondary or concurrent phenomena. For the development of this acid, which may be of almost any variety, it is not even necessary to look for causes outside the organism, as the saliva and buccal mucus may contain its formative elements, even in perfect health and under physiological conditions. The effect of these secretions becomes all the more marked under pathological conditions, and the importance of frequent cleansing of the mouth in the acute febrile affections and in the various indigestions is insisted upon.

Most commonly, however, the causes are external, and are to be found in the various articles of diet, both food and drink, and in substances used medicinally or as cosmetics. The effect of the several dangerous ingredients is shown by experiments, the form in which they are taken into the mouth is stated, and the necessary precautions are given by the observance of which their injurious effects may be avoided.

Physicians as well as dentists are placed under obligations by Dr. Chandler for laying this important work before them. The well-earned reputation of American dentistry has been gained rather through the successful treatment

of results than by the acquisition and promulgation of accurate knowledge as to causes. The community are in greater need of the latter than the former, and this need should largely be supplied through the physician, as he is first called upon for advice as to the best means of producing the best being. To him, therefore, the present treatise is to be commended as containing what he ought to know. The foregoing statement as to some of the contents of the book, and the manner in which they have been arrived at, should indicate that knowledge is to be obtained from the work rather than theory or hypothesis.

As professor of dentistry in Harvard University, Dr. Chandler's attention must have been early attracted to this book, and his opinion of its value may readily be inferred from his willingness to spend the greater part of two years in preparing the translation. But his work has been not only that of translator (and a most excellent one), for he has added such notes concerning the treatment of the affection as seemed to him advisable. These are the results of his individual experience, and will necessarily commend themselves to dentists. He has further added to his labors by the preparation of an index, one of the most important parts of any valuable work of reference.

The volume is illustrated from the original plates and wood-cuts, and is published by Houghton, Osgood & Co.

THE DUTIES OF THE MEDICAL PROFESSION CONCERNING PROSTITUTION.

Questions of this character have been so profusely debated, and so little that has proved satisfactory has been deduced from the various schemes devised for the extinction of the great social evil, that we should hardly venture into a discussion of a problem so apparently hopeless of solution did not the suggestions conveyed in a recent paper on this subject come from the pen of a writer whose opinions are entitled to respectful consideration. Dr. Gerrish has attempted, in an address delivered before the Maine Medical Association at its last annual meeting, to offer a plan, as he thinks, somewhat different from those which have hitherto been advanced. He sums up the views given in his paper in the following words: —

"We have seen that prostitution is becoming alarmingly common; that the methods of dealing with it which have been most extensively tried have failed to control it, or to limit the diseases which arise from it; that it is to be regarded as a disease of the body social, which we cannot hope to cure unless we remove the causes on which it depends; that the chief of these causes is ignorance, which creates a demand for illicit intercourse; that, while a lack of ordinary information and learning is conducive to depravity, it is ignorance of the laws of our being which is chiefly responsible for the mischief; that the proper and competent teaching of physiology and hygiene to the young would result in such an improvement of morals that, in time, prostitution would largely disappear for want of support and patronage; that, while education is the great means for removing the chief cause of the social evil, it is necessary to

employ other measures of a curative character, such as punishment of sexual crimes, severe restrictions on the permanently diseased, and reformatory efforts; and that the medical profession, being in the best possible position to appreciate the evil and to apply the remedy, owe it to the community to undertake the educational work, and to establish the other measures suggested."

In speaking of previous methods he emphasizes the statement that attempts to suppress prostitution have failed from a lack of supporting moral sentiment in the community, and from the fact that women only are attacked. His criticisms on the method generally known as licensing are, we think, excellent, and expose clearly the failure of any such law to lessen disease or to increase morality. His own plan, it will be seen, may be summed up in the one word, education. Without indulging in "contumelious criticism," which the author appears to anticipate, we may say that there are many topics contained in this plan, such as the sexual relations of husband and wife, or the relation of parent to child in regard to instruction on sexual matters, on which, no doubt, much excellent advice may be given, but which hardly come within the scope of any practical scheme with which physicians in their professional capacity can concern themselves. In regard to the teaching of physiology and hygiene to the young, we believe that, although plausible, the attempt to include instruction in the physiology of the sexual functions is a plan which can never be carried out. The author admits that "the right book has yet to be written;" we have always maintained the opinion that it is not possible to handle this subject in such a way as to produce a book fit to be placed in the hands of young girls or boys, much less to be used by teachers in the schools. We cannot agree with Dr. Gerrish in his views on efforts at suppression of the vice, or in any plan to quarantine every person who has primary syphilis. "The prohibition of marriage of syphilitics" might no doubt be desirable, but is hardly feasible on grounds that we have scarcely space even to allude to. Another suggestion, namely, "free hospital treatment of all venereal patients," is, we think, highly desirable, and one that cannot be too strongly insisted upon by the profession, particularly in communities disposed to exclude individuals affected with such diseases from the protection of dispensary treatment. Finally, the "systematic efforts of the reformation of prostitutes" is a work which we would most cordially indorse, and one in which much more is to be accomplished than has hitherto been attempted.

Dr. Gerrish has handled a delicate subject in a skillful manner, but he has failed to convince us that it is the duty of the physician to advise public education in matters which should be left, we think, to the private judgment or tact of individual parents. We fear, indeed, that many long years will elapse before a solution of this great evil will be reached.

MEDICAL NOTES.

—In the *Berliner klinische Wochenschrift*, Nos. 24, 25, 1878, Professor Hueter reports the successful treatment of seventeen cases of erysipelas by the subcutaneous injection of carbolic acid. Details in translation may be found in the *Medical Times and Gazette* for September 7th.

— The *Medical Examiner* of London is said to be in a moribund condition. It was a sprightly journal.

— Mr. Richard Davy has been elected to the chair of orthopædic surgery in the Westminster Hospital of London. — Dr. Bardeleben has been appointed dean of the faculty of medicine in the University of Berlin. — Professor Hasse, of Göttingen, has been excused from the performance of his duties, at his own request, because of his age and illness.

— An aged forester has published the following in a Leipzig journal: "I do not wish to carry to my grave my much-proved cure for the bites of mad dogs, but will publish the same as the last service which I can offer to the world: Wash the wound perfectly clean with wine-vinegar and tepid water; then dry it. Afterward pour into the wound a few drops of muriatic acid, for mineral acids destroy the poison of the dog's saliva."

— Quincke finds, contrary to a natural supposition, that while there is a diminished secretion of urine during sleep, the reverse takes place immediately after waking, and that for some time afterward more urine is secreted than during any other similar period of the twenty-four hours. Quincke is unable to furnish a reason for this peculiar phenomenon.

— According to the *Lancet* the latest researches of Claude Bernard led him to conclude that the very alphabet of the opinions which have been so largely built up by the labors of Pasteur is erroneous.

— The *Lancet* says that "the relation of the amount of quinine eliminated by the urine to that taken by the mouth has been studied by M. Personne, with the object of determining what proportion is destroyed in the economy. He found that all the quinine which is eliminated by the urine and soluble in acids can be transformed into neutral sulphate of quinine without appreciable residue; also that a resinous material is obtained, insoluble in acids, and similar to that which is obtained during the extraction of the alkaloids of cinchona. Hence it is inferred that the quinine which is eliminated by the urine has not undergone any appreciable alteration or isomeric modification. These substances represent nearly one half of the quinine which is taken in, and hence at least one half must be destroyed in the economy."

— During the last nineteen years diphtheria has been the cause of 6802 deaths in the Australian colony of Victoria.

— The *London Lancet* (page 427) declines to notice a medical association "while the name of a female member is retained on the list."

— Carbolic acid is said to be a specific in cases of mosquito and wasp bites.

CHICAGO.

— Quite an important decision touching the powers and prerogatives of the Illinois State Board of Health has just been rendered by Judge Williams, of Chicago. The state board is by law charged with a double duty, — that of looking after the health of the State, and of looking after the doctors. No man by law is allowed to practice medicine in the State without a license from the board, unless he had been in actual practice in the State ten years prior to January, 1878. The board is empowered to revoke the license of any one for unprofessional conduct. They had threatened to visit this penalty upon one

Dr. N. T. Aikin, of Chicago, who had advertised in the daily papers in a very offensive way. Aikin therefore commenced proceeding before Judge Williams for a temporary injunction to prevent the board from carrying out their threat. The case was argued two days by able counsel on both sides. The claim of Aikin was that his license was property, as it was the means of his earning a livelihood; that the board in revoking it would clearly violate the provision of the constitution that no man should be deprived of life, liberty, or property without due process of law. The board presented affidavits of eight practitioners, representing all the 'pathies, to the effect that they had read the advertisements of Aikin, and considered them unprofessional and false.

In the course of the arguments the prosecution referred to the advertisement of an optician, in the daily papers, to which was appended the indorsement of eighteen professors in medical colleges in Chicago, and claimed that these physicians were liable to the same penalty that was visited upon the plaintiff. An article in the last number of the *Medical Journal and Examiner*, by Dr. Ingalls, in which the action of these professors was condemned, was read to sustain the position taken.

The court took the case under advisement, and in ten days rendered a decision, in which it sustained the board of health, and refused the injunction. He said it was by law an express function of the board to have supervision of the matters at issue, — to exclude empirics and raise the standard of medical acquirements. The legislature had clothed the board with wide discretion as to the professional conduct of physicians, which courts should not interfere with. "Equity would not interfere by injunction for the purpose of controlling the action of public officers constituting inferior quasi-judicial tribunals on matters properly pertaining to their jurisdiction." A license to practice medicine was like a license to practice law; neither was a constitutional privilege or property.

In no proper sense could the words "property" and "contract" be applied to the right to practice. Such right was not descendable from its possessor to his heir, could not be bought or sold, and might be lost by misconduct or immorality on the part of the practitioner. The right was merely a statutory privilege, and did not rise to the dignity of a contract or of property. The objection to the law on the ground of want of uniformity in its provisions was not well taken, for although the law should bear equally on all citizens who stood in the same relation to it, it could not be said that physicians who had practiced in the State ten years, and those who had not, stood in the same relation to the law.

There is a suspicion that now the right of the board to revoke a license for unprofessional conduct is established there are other heads beside that of the Chicago advertiser that are in danger.

— When the rules and regulations of the public (county) hospital of Chicago were amended last July, the county commissioners, in enmity to medical colleges, doubled the fees to students, fixing them at ten dollars per annum. On the 14th of October they were induced by the new medical board to reduce the price to the former standard of five dollars.

LETTER FROM LONDON.

The University of London: The Admission of Women.

Mr. Editor, — In a previous letter I gave some account of the legal status of the medical profession in Great Britain, and of the position occupied by the various corporations and universities. In my present letter my wish is to give some account of the University of London, which is one of the most important of the many licensing bodies of the United Kingdom, and foremost by its traditions and character in the introduction of reforms in the methods of study and of examination. The University of London was founded in the year 1836. Prior to that year there were three English universities, those of Oxford, Cambridge, and Durham, but the latter being only a small foundation for the use of the districts in its immediate neighborhood, it may be said that the whole of the higher education of the country was in the hands of the two ancient universities first mentioned. Like all corporations which are at the same time very old and very wealthy, the universities of Oxford and Cambridge had acquired a series of traditions to which they adhered most pertinaciously; they were conservative to the backbone, and no proposition for a change in their time-honored customs had the least chance of success at the hands of the governing bodies of those august seminaries. These traditions had been handed down from times when the constitution of society was very different from what it had become in the early decades of the present century. The University of Oxford had been the great stronghold of loyalty to the crown during the troublous times of Charles I., and it had been the headquarters of the Church of England during the ascendency of the dissenters under the Commonwealth and of the Roman Catholics under James II. It is not to be wondered at, then, that loyalty to the crown and to the church had become by-words in connection with the university, and that they were points upon which it was essential that all who were connected in any way with the university should be thoroughly sound. During the last century this sectarianism, if we may so call it, corresponded very closely with the general sense of the country. Most of the learning and refinement was to be found amongst the upper classes, who with few exceptions were loyal to the church. Dissent, on the other hand, was mainly confined to the lower middle and lower classes, who at that period had no aspirations beyond the conditions in which they had been brought up; whilst the troubles arising from Roman Catholicism were of sufficiently recent date for the "No Popery" cry to be one of considerable political importance. Thus learning came to be left almost exclusively in the undisputed possession of the Church of England.

So things went on until about the year 1820. At that time the country, which had been for many years occupied and exhausted by the Napoleonic wars, had to some extent recovered its strength, and was turning its attention to home affairs. The steam-engine was beginning to be largely used, and the impulse it was giving to trade and to scientific investigation tended to modify the whole tone of society, and profoundly to alter the relative positions occupied by its different classes. Now first began to be heard the clamor against the disproportionate power of the aristocracy; the Church of England re-

ceived one check after another in the abolition of the Test Act, the Catholic Emancipation Bill, and in other ways; and the dissenters, who had previously been of small account in the state, began to make their power felt, both by their numbers and by the influence exerted by many of their leading men. As a consequence of the equalization of classes thus inaugurated came an increased demand for learning and for the advantages of a university education. Oxford and Cambridge, however, true to their traditions, refused to admit those who were not prepared to be baptized into the Church of England and to sign the thirty-nine articles. Being self-governing bodies, they were at liberty to act as seemed good to themselves in the matter, and hence all dissenters, Jews, and Roman Catholics were excluded from the means of obtaining a high education. By the nature of their constitutions it was impossible to carry the universities by storm against the will of the majority of their members, and hence came the necessity for starting some new educational body which should take the place of the older corporations amongst the large section of the population which was unable to partake in the benefits offered by the latter. So it came about that in 1826, owing to the exertions of a number of influential men, conspicuous amongst whom was Lord Brougham, a college was founded in London, to which the name given was the University of London. The object of this college was to afford a liberal education in all subjects, whether classics, mathematics, medicine, law, or science, to all those who could pay the fees, irrespective of race, creed, or position in life This, however, was only a teaching body, and did not grant degrees; hence it fulfilled but one of the functions of a university. It was not until 1836 that the project of supplying a substitute for the older universities was fully realized. In that year a charter was obtained from the crown which authorized the foundation of a body with full powers to grant degrees in all branches of learning except religion. This body was to be called the University of London, and the college which already bore that name was in future to be called University College, London.

The University of London thus created is a body whose functions may be said to be purely those of an examining board; with teaching it has nothing whatever to do. The principle upon which it acts is to grant its degrees to any one who can pass its examinations, without inquiring how the candidates have acquired their knowledge. It matters not whether they have come up from the older universities or from University College, London, or whether they have gained their knowledge by solitary reading in hours snatched from the routine work of a merchant's office or a bank counter. The doors of the university are open to all, and any one who can prove to the satisfaction of the examiner that he has the requisite knowledge is granted a degree which takes rank with the degrees of the more ancient foundations.

There is one necessary exception to the general and indiscriminate welcome thus held out to all comers: in medicine the requisite knowledge is of so essentially practical a character, and it is of such supreme importance to the community at large that the holder of a degree in medicine should be possessed of this practical knowledge, that the university demands from all candidates for examination in this subject proof of having enjoyed opportunities of obtaining it. It has drawn up a list of medical schools and colleges which it considers to be capable of affording the necessary instruction, and no one is

admitted to examination who has not followed a course of study in one of them. The university goes further, and defines very explicitly what that course of study must be, and in this respect it is perhaps the most stringent of all the medical corporations in England. It is not enough that the student shall have pursued his studies for a certain length of time, and shall have attended the practice of a hospital for so many terms, but it is required of him that he shall pass his examinations at certain intervals, and that he shall employ the intervals in a certain definite way. It will be better understood if I give a short account of the regulations drawn up for candidates for the degree of doctor in medicine. The first examination to be passed is the matriculation, which is demanded in common from all candidates for degrees, of whatever kind. This, as elsewhere, consists of papers in classics, mathematics, modern languages, chemistry, etc., and is only such as any intelligent and well-educated lad of sixteen or seventeen can pass without much difficulty. Following this at an interval of a year is an examination in general science, including physics, mechanical philosophy, inorganic chemistry, botany, zoölogy, etc. This is followed, at the end of one year, or more frequently of two years by the first professional examination, in which the candidate's knowledge is tested in anatomy, physiology, organic chemistry, therapeutics, etc.; and in this examination the student is expected to dissect one or more regions practically, to prepare microscopical specimens, to test for substances occurring in organic chemistry, and, in short, to prove to the examiner not only his theoretical knowledge, but also his ready command of practical processes. Having passed this ordeal, the student is not allowed to present himself for the next examination until an interval of between two and three years has elapsed, during which time he must be engaged in hospital work and in practical obstetrics, and according to the strict rules of the university — which are, however, somewhat difficult to carry out in all cases — he must have spent at least six months in residence in a hospital, with responsible charge of patients under a physician. This examination — which entitles successful candidates to the minor degree of bachelor of medicine — comprises papers in medicine, surgery, midwifery, pathological anatomy, medical jurisprudence, toxicology, and other subjects, in addition to practical examinations in clinical medicine held in the wards of a hospital, in midwifery, and in the practical testing for poisons. The full degree of doctor of medicine may be obtained one year later, medicine forming in this case the great feature in the examination, a paper on logic and moral philosophy being, however, added. In all cases except the last there are over and above the pass examinations special examinations for honors in any of the subjects included in the prospectus. In these the standard is the highest attainable, and the student who obtains the first place in each subject is rewarded by a gold medal, and by a yet more substantial recognition of his merit in the shape of money prizes varying from £50 to £150. The minimum period over which the curriculum extends will thus be seen to be between five and six years, and few students obtain the full degree of doctor of medicine until between six and seven years after the commencement of their studies, and to do even this they must spend their time in almost unremitting labor.

Such, then, is the University of London. At the present time it grants de-

grees in arts, laws, medicine, surgery, and science, and it is about to institute a series of examinations in music. In all the faculties its examinations are confessedly some of the most searching and stringent in the United Kingdom; and in medicine its degree is not only deservedly at the head of all the other medical degrees and diplomas, but it is now held by a large proportion of the men whose names are best known for thorough and energetic work in the medical profession of this country.

I must not close without making some allusion to the changes which have taken place in the older universities since the foundation of the University of London, which changes may in great part be traced to the influence exerted by the latter. Little by little the old prejudice in favor of the church has been giving way. Dissenters and other non-churchmen were after long hesitation admitted to the degrees, and eventually even to certain of the rewards in the shape of fellowships, though a very considerable number of the latter still remain exclusively in the hands of the church. The curriculum has been made to embrace a much wider group of subjects, and far greater attention has been paid to science in all its branches than was formerly the case. Compulsory residence in one of the colleges during the period of study, which shut out a large number of men from the advantages of a university training, in consequence of the heavy expenses which had come to be associated with it, is now no longer required; and any young man may live in one of the university towns as an under-graduate in his own lodgings and in his own way, thus diminishing his expenses to little more than half. In addition to this, both Oxford and Cambridge are making endeavors to extend the opportunities for education throughout the country by sending experienced lecturers into the large towns, helping to found local colleges in different places, and instituting examinations for admission, to which a certain age is the only qualification required.

There is one reform which is in process of execution at the present moment, and in this the universities of Cambridge and of London are competing for precedence. I refer to the admission of women to university privileges. The first step in this direction was made several years ago, when Oxford and Cambridge almost simultaneously agreed to admit girls to the local examinations just referred to. Oxford has never gone further than this, but the movement was shortly followed up at Cambridge by the foundation of a college for women, which did not long remain the only one, and there now exist two such colleges, Girton and Newnham. In these the education is the same as that given to men, and though the university has not yet gone the length of admitting women to its degrees, yet many of the university examiners have agreed to give the ladies the same papers that they have drawn up for the men, to look carefully through the answers, and to let them know what places they would have obtained had they been admitted to the degree.

The University of London, not being a teaching body, has proceeded in a different way. Within the last six months it has agreed by large majorities in the convocation and in the senate — which are the upper and lower governing bodies of the university — to throw open all its degrees of every kind, medicine and law included, to ladies, under exactly the same conditions as to men;

and at the same time University College, London, has agreed to open the whole of its classes, except those in medicine, to women. The whole movement is too recent to show results at present, but it is one which is attracting a great deal of attention and giving rise to no small discussion between its suppo. ters and opponents. This, however, is the stage at which the educational movement has now reached, and it is not going too far to attribute in great measure the marked change in public opinion which it indicates to the initiative taken by the University of London.

SHORT COMMUNICATIONS.

PRELIMINARY EDUCATION.

Mr. Editor, — In your issue of the 26th of September was contained a criticism of the Preliminary Course of the Johns Hopkins University which touched upon some vital points of medical education. I have looked for some vindication of the "new departure;" in default of any other I would submit the following answers to some of the strictures in the editorial referred to.

In the first paragraph of the article it is stated that "the object of this plan, as now arranged, is evidently the giving instruction in those subjects only which have a direct bearing upon the student's future studies and pursuits, it not having been thought necessary to give the future student of medicine the benefit of a liberal education, such as could be obtained in the academic course, and in accordance with the suggestions contained in the lectures alluded to."

To this may be answered: —

(1.) A "liberal" education, such as our colleges now furnish, is hardly ever carried on to such an extent as to make it, of itself, truly liberalizing; it is useful as a preliminary course to a real university course in academical studies, but it does not "liberalize" the graduate who terminates this line of studies at his graduation.

(2.) The best liberalizing influence is that which comes from a thorough knowledge of that which one pretends to know. The model which thorough mastery of a subject furnishes a student is of much better influence upon him than a superficial knowledge of many subjects.

At the end of the criticism occurs the following passage: "The university diploma is the lowest standard which such a school can afford to adopt, if it is to take the high rank that medical teachers throughout the country hope for. In addition to its own diploma those of certain other of our best universities might be accepted, or the student be subjected to a preliminary examination which would in all respects be the equivalent."

I would submit that it is evident on the face of the matter that the preliminary course of the Johns Hopkins University is something entirely different from any of our college courses; consequently, that it is not instituted in comparison with such, that it is not higher or lower, as the above quotation implies. It is, on the other hand, in opposition to the university (college?) courses as a preliminary exercise for medical men; now if thorough knowledge of the science of medicine is the object in view, it would be interesting to know of any college course that can compete with this preliminary course in fitting one for a medical school.

Finally, the review speaks of the Johns Hopkins preliminary course as having "a high-school rather than a university" flavor. In looking over the announcement of the course it seems to me that the few text-book recitations, together with the number of lectures and the large amount of laboratory work, suggests that as to "university flavor," although a preliminary course, it will compare favorably with the medical course in Harvard University, which has been so frequently alluded to as superior to anything on this continent.

Very respectfully yours, David Hunt, M. D.

ABSTRACT OF SANITARY REPORTS RECEIVED DURING THE PAST WEEK UNDER THE NATIONAL QUARANTINE ACT. — No. XV.

OFFICE SURGEON-GENERAL U. S. M. H. S., WASHINGTON, *October* 19, 1878.

NEW ORLEANS, LA. — During the week ended yesterday afternoon there were 976 cases of yellow fever and 235 deaths, of which 89 cases and 36 deaths occurred in the last twenty-four hours reported. Total cases 12,182, deaths 3635.

No cases of yellow fever at Port Eads or South West Pass during the past week.

BATON ROUGE, LA. — During the week ended yesterday at nine A. M. there were 301 cases of yellow fever and 16 deaths. Total cases 2170, deaths 129.

MORGAN CITY, LA. — There were 16 deaths from yellow fever during the last week. The number of cases was incorrectly given for the last report. Total cases to date reported to be about 432, total deaths 87.

MOBILE, ALA. — For the week ended yesterday noon there were 56 cases of yellow fever and 12 deaths. Total cases 93, deaths 32.

DECATUR, ALA. — Seventy-three cases of yellow fever and 12 deaths during the week ended yesterday. Total cases 155, deaths 27.

OCEAN SPRINGS, MISS. — During the week ended yesterday noon there were 25 cases of yellow fever and one death. Total cases 128, deaths 29.

PASS CHRISTIAN, MISS. — There were 32 new cases of yellow fever and four deaths for the week ended yesterday. Total cases 126, deaths 13.

BAY ST. LOUIS, MISS. — During the week ended yesterday evening there were 52 cases of yellow fever and 12 deaths. Total cases 338, deaths 68. The fever is on the decrease for want of material. The cases occurring now are more malignant.

FRIAR'S POINT, MISS. — Eight cases of yellow fever and two deaths during the week ended yesterday evening. Total cases 21, deaths 6.

CRYSTAL SPINGS. — The yellow fever is confined principally to the country around Dry Grove and Lebanon Church. No case has yet occurred within the limits of the village of Crystal Springs. During the past week there were 31 cases and eight deaths. Total cases 112, deaths 44.

PASCAGOULA, MISS. — Total cases of yellow fever at quarantine to October 12th, five; deaths, two.

SCRANTON, MISS. — Total cases of yellow fever to October 12th, five; deaths, three.

VICKSBURG, MISS. — For the past week there were 32 deaths from yellow fever in the city, and 64 in the county of Warren, outside of the city. Total deaths in city and county 1074.

HOLLY SPRINGS, MISS. — Total number of cases of yellow fever to yesterday evening 1117, deaths 285. About two hundred cases under treatment. The fever is spreading into the surrounding country. A slight frost occurred in the night of October 16th.

GRENADA, MISS. — For the week ended yesterday evening there were four new cases of yellow fever, and two deaths. The fever is spreading into the country. In 14 families containing 97 unacclimated persons there occurred 41 cases and two deaths during the past week. Total deaths in Grenada and adjacent country 327.

BOLTON, MISS. — Total cases of yellow fever to yesterday evening 117, deaths 31. The first case occurred August 12th.

HERNANDO, MISS. — During the week ended yesterday evening there were 50 cases of yellow fever and 23 deaths, — several of the cases from one to three miles in the country. Total cases 133, deaths 56. A light frost was observed this morning.

MEMPHIS, TENN. — For the week ended the evening of the 17th inst. there were 108 deaths from yellow fever. Total deaths 2892. Dr. Thornton, in charge of the Marine Hospital service at Memphis, has the fever.

CHATTANOOGA, TENN. — One hundred and one new cases of yellow fever, and 30 deaths, for the week ended at four o'clock, P. M., yesterday.

PARIS, TENN. — No cases of yellow fever or deaths for the week ended yesterday afternoon. A frost has occurred, and no further trouble is expected.

MILAN, TENN. — The first case of yellow fever — a refugee — occurred August 26th. The first case among inhabitants October 12th. Total cases to yesterday three, deaths three.

CAIRO, ILL. — No report of cases or deaths received. Assistant-Surgeon Roswell Waldo, of the Marine Hospital service, died of the fever at his post yesterday.

ST. LOUIS, MO. — Four deaths from yellow fever at quarantine during the past week.

LOUISVILLE, KY. — For the week ended yesterday there were fifteen new cases of yellow fever and five deaths. Of these numbers, 14 cases and five deaths were among the inhabitants in the locality before described. Total cases 127, deaths 54, of which 89 cases and 34 deaths were among refugees.

KEY WEST, FLA. — No new cases of yellow fever during the week. One death occurred the 12th inst. Total cases 37, deaths 17.

No reports received from the following places, where the yellow fever exists: Plaquemine, La.; Port Gibson, Miss.; Mississippi City, Miss.; Greenville, Miss.; Spring Hill, Miss.; Water Valley, Miss.; Biloxi, Miss.; Canton, Miss.; Brownsville, Tenn.; Grand Junction, Tenn.; Hickman, Ky.; and Gallipolis, Ohio.

HAVANA, CUBA. — Twenty-four deaths from yellow fever and one from small-pox for the week ended October 12th. The deaths from all causes for the months of April, May, and June last were 3030, — an increase of 989 deaths over the total for the same months of 1877; of this *increase* 535 deaths were from small-pox, 98 from yellow fever, and 130 from diarrhœa. The deaths from yellow fever the past summer are recapitulated as follows: April 28, May 53, June 184, July 504, August 374, and September (to the 28th) 168, making a total of 1311 deaths.

MATANZAS, CUBA. — Official returns of the Board of Health for the months of June, July, August, and September show that during that period there were 279 cases of yellow fever with 91 deaths. Cases are now rare, and the fever has almost ceased.

MOROCCO, AFRICA. — Advices from Tangier up to September 21st report the prevalence of cholera, small-pox, and malignant fevers throughout the empire, except in the country fronting the Spanish coast. Small-pox prevails in every port except Tangier and Tetuan. The deaths from cholera at Casablanca — a port of five thousand inhabitants — were on the increase, and numbered 103 on the 17th of September. Hundreds have died in the interior from cholera, fevers, and starvation, especially in the middle and southern provinces.

JOHN M. WOODWORTH,
Surgeon-General U. S. Marine Hospital Service.

COMPARATIVE MORTALITY-RATES.

	Estimated Population, July 1, 1878.	Deaths during week ending Oct. 12, 1878.	Annual Death-Rates per 1000 living.		
			For the Week.	For the Year 1877.	Mean for ten Years, '68–77.
New York.	1,093,171			23.42	28.71
Philadelphia.	876,118	298	17.69	18.80	21.54
Brooklyn.	549,438	184	17.41	21.51	25.50
Chicago.	460,000			17.83	22.39
Boston.	375,476	150	20.77	20.10	24.34
Providence.	100,000	30	15.60	18.81	19.20
Lowell.	55,798	10	9.32	19.09	22.50
Worcester.	54,937	21	19.89	20.06	22.30
Cambridge.	53,547	21	20.39	18.69	20.83
Fall River.	53,207	36	35.19	21.35	24.96
Lynn.	35,528	19	27.82	20.42	19.67
Springfield.	33,981	8	12.25	16.02	19.77
Salem.	27,140	11	21.07	20.38	21.15

Mr. Henry C. Lea, the well-known publisher, makes an unusually attractive announcement of books in preparation for early publication: The National Dispensatory, by Dr. Stillé; new editions of Ashurst's and Bryant's Surgery; a book which everybody will read with great interest, namely, a new work on Gynæcology, by Dr. Emmet; also a work on Anatomy, by Drs. Allen and Shakespeare; and, finally, Ranvier's well-known little Pathology, translated by Dr. Shakespeare.

We are requested by a leading practitioner of this city to say that an individual calling himself Dr. Johnston, of England, visited him a few days since asking pecuniary aid, and upon inquiry he learns that he has already received assistance, and has been offered a free passage home in one of the Cunard steamers.

P. will find the letter of the vice-president of the Homœopathical Society of London in the *Lancet* for June 2, 1877.

Copies of the Transactions of the Medico-Legal Society may be obtained at Houghton, Osgood & Co.'s, 220 Devonshire St. Price 35 cents.

The Gynæcological Society of Boston. — The ninety-sixth meeting of the society will be held in the parlors of the Evans House, the first Thursday of November, at two o'clock, P. M. Members of the profession are cordially invited to attend after the transaction of society business. Henry M. Field, M. D., *Secretary.*

Suffolk District Medical Society. — A stated meeting will be held at 36 Temple Place, on Saturday evening, October 26th, at seven and a half o'clock. The following papers will be read: —

Dr. J. R. Chadwick, Cases of Retroversion complicated with Pregnancy, one being at full term.

Dr. G. W. Gay, a Case of Œsophagotomy.

Supper at nine o'clock.

American Public Health Association. — The eighth annual meeting will be held in Richmond, Va., on the 19th and 22d of November. The following will be the order of business: —

Reception of Report of the Commission investigating the History of the Epidemic of Yellow Fever, submitted by Dr. J. M. Woodworth, Surgeon-General of United States Marine Hospital Service.

Reception of the other Reports and Records of this epidemic — from all sources.

Reception of other Reports and Communications on the Epidemics and Sanitary Experience of the Present Year.

Announcement of the contributions of information and the presentation of communications from members of the association, state boards of health, municipal sanitary officers, and others.

Members of this association residing in Virginia, the governor of the State, and other citizens, have tendered ample facilities for the meeting, which will be held in the hall of the House of Delegates at Richmond.

Eminent public men from the South and from the chief cities of our country have promised attendance, and medical and sanitary authorities and other citizens who seek to promote the public health are cordially invited to participate in the deliberations, to be wholly devoted to sanitary matters of state and national importance.

The secretary of the association is Dr. Edward H. James, of New York.

Correction. — On page 462, last line but one, for 1878 read 1877.

Books and Pamphlets Received. — The Treatment of Diphtheria. By William C. Reiter, A. M., M. D. Philadelphia: J. B. Lippincott & Co. 1878.

Sound and the Telephone. By Clarence J. Blake, M. D., Boston. Read before the British Society of Telegraph Engineers, May 8, 1878.

Studies on the Laws of Life. By Dr. Nathan Allen. Lowell. 1878. Pp. 32.

Notes taken from a Lecture by Dr. Manuel Dagnino at the Medical University of Caracas, Capital of Venezuela, on the Treatment of Yellow Fever. Translated into English by Dr. Antonio De Tejada, of New York.